

## Claims

- [c1] 1. A system for enriching a document, comprising:  
a document editor for authoring the document; and  
a directed search service for specifying a directed search while the document is  
authored with the document editor; the directed search service including search  
criteria and result parameters that may be specified by a user; the result  
parameters including information provider parameters, location parameters and  
form parameters; the information provider parameters identifying one or more  
information providers to perform the directed search and provide search  
results; the location parameters identifying where in the document the search  
results are to be inserted; and the form parameters specifying a form in which  
the search results are to be inserted into the document;  
wherein the directed search service inserts the directed search in the document.
- [c2] 2. The system according to claim 1, wherein the form parameters are one of a  
link, content, and metadata.
- [c3] 3. The system according to claim 1, wherein one form parameter specifies how  
frequently the directed search is to be performed.
- [c4] 4. The system according to claim 1, wherein the information provider  
parameters include language, quality, quantity, and cost.
- [c5] 5. The system according to claim 4, wherein the search parameters includes  
means for specifying information providers according to a user defined criteria.
- [c6] 6. The system according to claim 1, further comprising a meta-document server  
for performing the directed search and providing the search results by querying  
the information providers using the search criteria and inserting the search  
results in the document.
- [c7] 7. The system according to claim 6, wherein the search results are integrated in  
the document while being authored with the document editor.
- [c8] 8. A system for enriching a document, comprising:  
a user interface for specifying a directed search while authoring a document,

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said user interface further comprising:  
means for specifying search criteria of the directed search; and  
means for specifying result parameters; the result parameters including  
information provider parameters, location parameters and form parameters; the  
information provider parameters identifying one or more information providers  
to perform the directed search and provide search results; the location  
parameters identifying where in the document the search results are to be  
inserted; and the form parameters specifying a form in which the search results  
are to be inserted into the document; and  
a meta-document server communicating with the user interface for carrying out  
the directed search.

- [c9] 9. The system according to claim 8, wherein the form parameters are one of a link, content, and metadata.
- [c10] 10. The system according to claim 9, wherein one form parameter specifies how frequently the directed search is to be performed.
- [c11] 11. The system according to claim 8, further comprising means for invoking the user interface from a document editor.
- [c12] 12. The system according to claim 8, wherein the information provider parameters include language, quality, quantity, and cost.
- [c13] 13. The system according to claim 12, wherein the search parameters includes means for specifying information providers according to a user defined criteria.
- [c14] 14. The system according to claim 8, further comprising means for exporting the document for import at other meta-document servers.
- [c15] 15. The system according to claim 14, further comprising means for importing an exported meta-document, said importing means creating a new meta-document with:  
first means for adding services in the new meta-document available at an importing meta-document server with services that map exactly to a predefined categorization; and

for those services not added by said first adding means but specified in the exported meta-document, second means for adding services in the new meta-document available at the importing meta-document server with services that map partially to a predefined categorization, and have at least one dictionary and one key in common.

- [c16] 16. The system according to claim 15, wherein dictionaries of two services are equivalent if they map to the predefined categorization.
- [c17] 17. The system according to claim 15, wherein two keys of a service map if they both reduce to a common generic key.
- [c18] 18. In a document enrichment system, a method for creating at a meta-document server a new meta-document from an exported meta-document, comprising:
  - (a) adding services in the new meta-document available at an importing meta-document server with services that map exactly to a predefined categorization; and
  - (b) for those services not added at (a) but specified in the exported meta-document, adding services in the new meta-document available at the importing meta-document server with services that partially map to a predefined categorization, and have at least one dictionary and one key in common.
- [c19] 19. The method according to claim 18, wherein dictionaries of two services are equivalent if they map to a predefined categorization.
- [c20] 20. The method according to claim 18, wherein two keys of a service are said to map if they reduce to a common generic key.